

REMARKS

Claims 1-24 and 26-29 are pending in the application. Claim 25 is cancelled. No new claims have been added.

REJECTION UNDER 35 U.S.C. § 102

Claims 1-29 are rejected under 35 U.S.C. § 102(e) based upon U.S. Patent No. 5,796,991 issued to Shimizu (Shimizu), U.S. Patent No. 6,396,535 B1 issued to Waters (Waters), and U.S. Patent No. 6,665,003 B1 issued to Peleg (Peleg). This rejection is respectfully traversed.

The Shimizu's invention relates to what is referred to as a driving simulator. Shimizu's system synthesizes the images of a real object such as a steering wheel, a user's hand and leg and the simulation image of the scene out of the window.

As a preliminary matter, Shimizu neither discloses nor suggests a "virtual point of view" of the claimed invention. In Shimizu, the vehicle does not actually move because the system is the driving simulator. Shimizu's system virtually displays the image which the user would see if he or she is actually driving. As shown in Fig. 10A, the user wears the display 102. That is to say, the point of view in Shimizu is the user's, not a "virtual point of view".

Shimizu discloses the terms such as "virtual" image and "virtual" space. Specifically, "virtual" is merely used as modifying the word "image" or "space" in Shimizu. On the contrary, according to the claimed invention, "virtual" modifies the "point of view". In addition to this explanation, the independent claims are further distinguished from the references as presented below.

Claims 1,9

Shimizu does not disclose nor suggest “changing a position or so of the virtual point of view in accordance with a running state of the vehicle” at least. In Shimizu, the vehicle does not actually move because the system is the driving simulator. Furthermore, the user’s point of view is not changed.

Claim 9

Shimizu does not disclose nor suggest “controlling capturing of an image outside a view range of the virtual point of view in accordance with a running state of the vehicle”.

Claims 10,16

Shimizu neither discloses nor suggests “generating an image including a first image viewed from the virtual point of view, and a second image viewed from a different viewpoint and different in a model” at least. In Shimizu, both the images of the real object such as a steering wheel and the simulation image of the scene out of the window are viewed from the user’s point of view in common. Also, Shimizu does not refer to a model of the image.

Claims 17, 23

At a minimum, Shimizu does not disclose nor suggest “displaying a vehicle region and an attention drawing region at the surroundings of the vehicle”.

Claim 24

At a minimum, Shimizu does not disclose nor suggest “the pixel data other than the camera images show a blind spot region”.

Claim 28

At a minimum, Shimizu does not disclose nor suggest “using mapping data describing a rate of necessity with respect to each of the pixel data for image synthesis”.

Claim 29

At a minimum, Shimizu does not disclose nor suggest "cutting out a mapping table from an original mapping table" at least.

Both Waters and Peleg do not teach nor suggest the claimed invention for at least the reasons provided above.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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